FUNSNAP

iDol Drone

User Manual

Catalogue

Introduction

The iDol drone is portable and easy to use, the body is collapsible and compact and is a fully functional aircraft.

As well as a remote control, the user can control flight and video/picture through an app or supported controller.

Featuring AI technology, the iDol drone features gesture control, smart following functions as well as one-button record and other features.

Take stable 1080p HD video with headless mode, electric fence and several built in security modes.

Make flight safe and reliable.

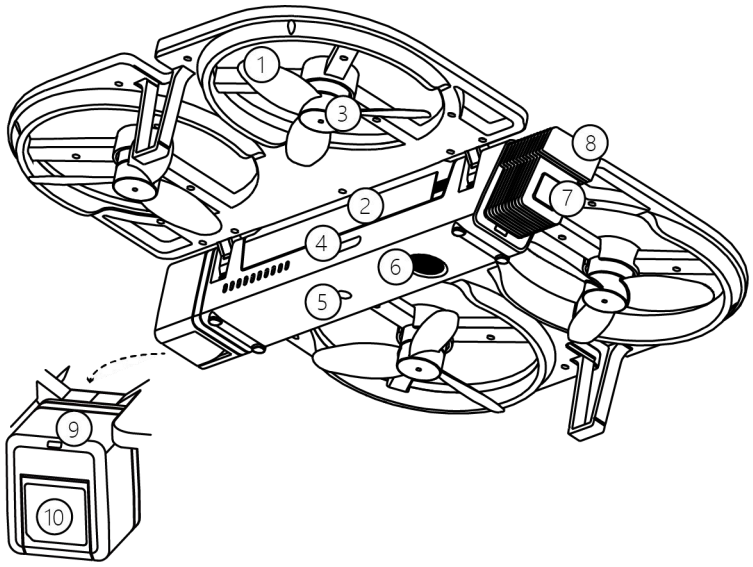
Package

Before using this product, please make sure the following items are included in the package. If there are any items missing please contact your dealer.

Item	Quantity
iDol Done (not including battery or propeller)	1
Lithium Polymer Rechargeable Battery	1
Propeller（CW×2，CCW×2）	4
Charger	1
Adapter	1
user manual	1

It is recommended that you first check the package contents and read the Disclaimer, safety information, battery safety instructions and quick start guide in order to get a basic understanding of the product. For more detailed information, read the user manual.

Main Components

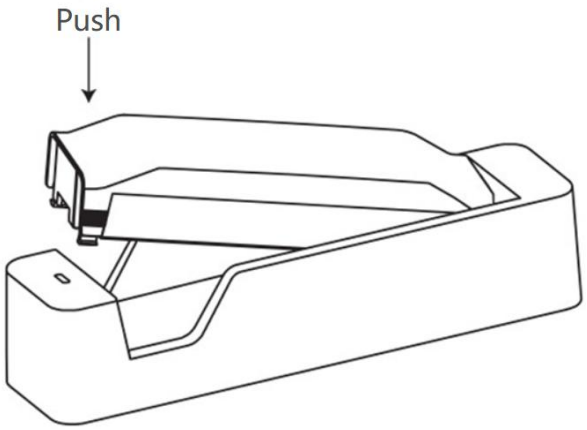


1) Propeller
2) Smart Battery
3) Motor
4) Micro USB Port
5) Visual Positioning System
6) Sonar
7) Drone Status Indicator/Power Indicator
8) GPS Module
9) Camera/Video Indicator
10) Camera

Flight Preparation

1) Charging Battery

Align the battery with the charger slot, then insert the battery into the charger, making sure the battery connects correctly.



Connect the power adapter and start charging.

Solid red light: No battery inserted or the battery is not connected correctly.

Flashing green light: Charging.

Solid green light: Battery is at full capacity.

Precautions:

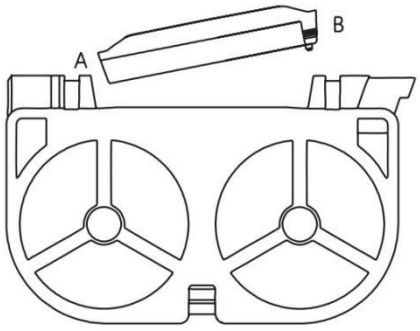
- ✧ Do not leave charging batteries unintended.
- ✧ It takes around 1.5 hours to fully charge the battery. Do not charge for too long and make sure to disconnect the power once the battery is charged.
- ✧ Not using the battery for extended periods of time may result it battery malfunction. Recharge the battery regularly to maintain battery health. Transport and store the battery according to the requirements in the Battery Safety Instructions.

✧ When the charger detect the battery temperature is outside of the normal operating range (5°C to 40°C), it will stop charging until the temperature returns to normal.

2) Battery Installation and Removal

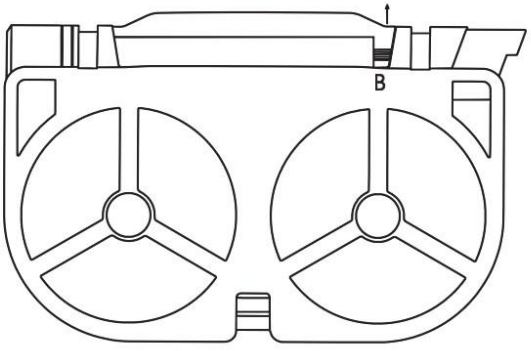
Installing the Battery

Ensure that battery is being inserted into the aircraft in the right direction. Insert side A first, then insert side B into the battery slot and apply a small amount of pressure. Once the battery clicks into place it is secure.



Removing the Battery

Press in the tabs on either side of the B side of the battery and pull the battery upwards.



Download APP

Search for Funsnap in the app store or scan the QR code to download the FUNSNAP app from the APP Store.

iOS **Android**

FUNSNAP requires iOS 9.0 and above or Android 4.4 or higher.

This manual is subject to change without notice. Please visit www.fun-snap.com for the latest version.

Preflight Check

Before flight please do the following checks before you take off.

- ✧ Whether the area is a no-fly zone.
- ✧ Check whether the propeller blade and fuselage are loose or damaged.
- ✧ Make sure that the cameras are clean and undamaged.

Flight Environment Requirements

Outdoors

1、Do not fly in bad weather such as rain, snow or strong winds.Keep the Drone in line of sight at all times. Keep away from obstacles such as high-voltage lines, trees, dense crowds and water.

2、Fly in a clear open area, do not fly near buildings and maintain a good distance from tall buildings to avoid GPS issues.

3、Do not fly near sources of large electromagnetic fields such as signal towers and WIFI base station to avoid interference.

4、Stay away from sources of large magnetic fields in order to avoid any interference with the onboard compass.

5、When above 4000 meters above sea level, environmental factors may affect flight.

6、If the GPS signal is low the drone will automatically use the ultrasonic sensor.

Indoors

1、Indoor flight uses camera and ultrasonic positioning (<2m). It is recommended that the floor have a distinctive texture in order for the drone to use these positioning methods.

2、Indoor flight requires a well-lit environment (>15 lux).

3、The optical and ultrasonic position may be unreliable at low altitude (<5m) when flying at high speeds.

Basic Use

LED Status Indicator

The tail of the drone has a status indicator that gives various information about the state of the drone. The indicator above the camera is a photo/video indicator that shows the camera’s mode. Please refer to the table below for information on the status indicators:

LED	Color & Status	Meaning
status/power indicator	Green	Power On
	Green	Power is Normal
	Flashing Red	Low Power
	Red	No connection to APP or Remote control
	Green	GPS Lock
	Flashing Yellow	No GPS Lock
	Flashing Blue	Firmware Update
	Red、Green and Blue LED Alternating	Hardware Malfunction
photo/video indicator	Flashing Red	Picture
	Slow Flashing Red	Video

Power On/Power Off

Press and hold the power key for 3 seconds. When the iDol powers on the power indicator light will turn green. The status indicator below the power switch will also turn green.

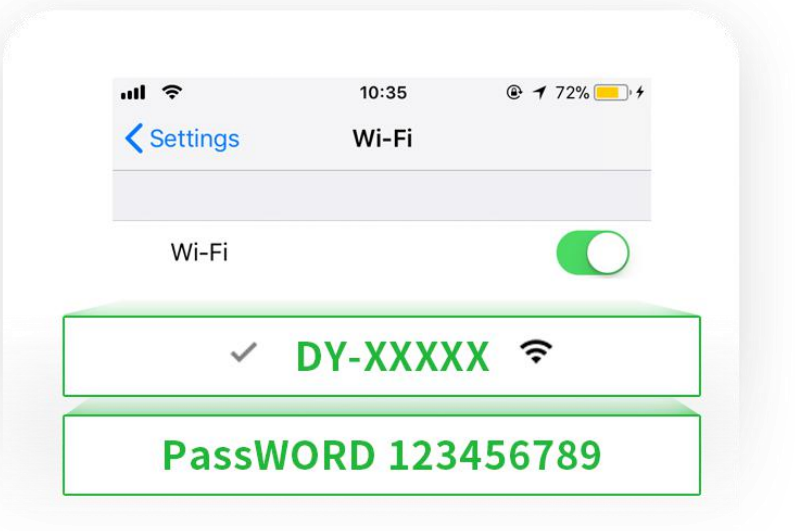
Press and hold the power key for 3 seconds. Once the status and power indicators go out let go of the power key.

Connecting to Drone

Wi-Fi connection to drone from mobile devices:

Turn on the drone and make sure it is in it’ s normal state.

Enter into the Wi-Fi setting page of the mobile device. The default Wi-Fi name is: DY-XXXXX (XXXXX is an independent SN identifier), The default password is: 123456789.

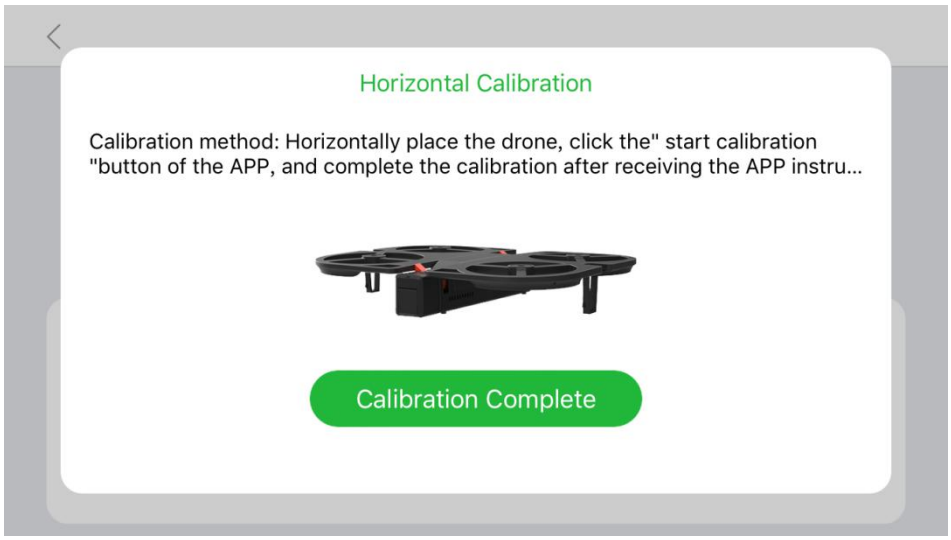


Notice:

You can change the Wi-Fi name and password in the APP settings.

Horizon Calibration

Unfold the drone, place it on a horizontal surface and turn it on. Connect to the APP and navigate to the APP’ s settings page, select “Sensor Calibration”, then “Level Calibration” and touch “start”. The status indicator will flash quickly for 5 seconds, after which the APP will display “successful calibration”.



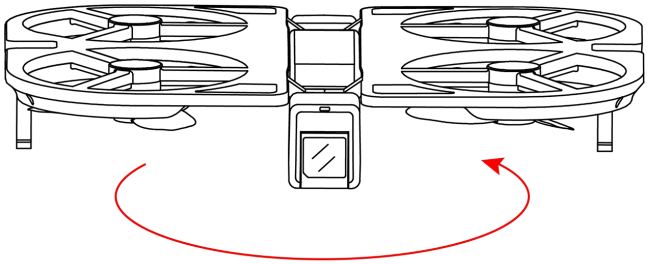
Tips:

- ✧ The flashing blue light indicates that the horizon calibration is not ready.
- ✧ If this happens place the drone on another horizontal surface and calibrate it again.

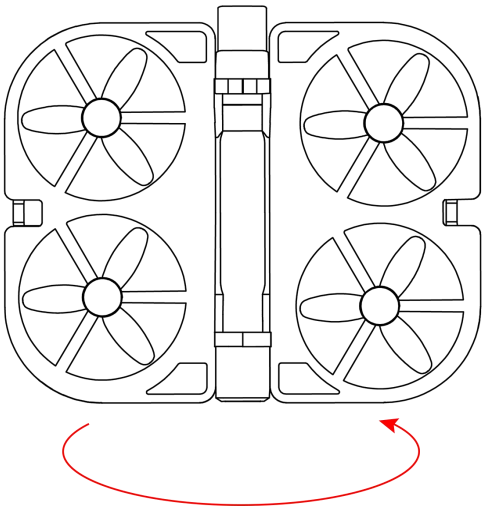
Compass Calibration

In the APP go to "Settings" / "Sensor Calibration" / "Magnetic Calibration" in the app and click "Start". The status indicator will start flashing white.

1、Rotate the drone horizontally 4 times. When the status indicator flashes twice go to the next step.



2、Rotate the aircraft as if doing a roll 4 times. When the status indicator flashes again the calibration is complete.



Precautions:

- ✧ Before flying a new drone, or if the flight is more than 100km away from the last flight location, please calibrate the compass before takeoff.
- ✧ Do not calibrate the compass near strong magnetic fields or large metal objects.

✧ If the calibration failed, restart the drone and repeat the above steps.

One Button Takeoff/Landing

Once the aircraft is turned on, place it horizontally on the ground and connect it to the APP. Touch the icon, the APP will display "Confirm Takeoff?", select "Yes" and the drone will take off. Touch again, the APP will prompt "Confirm Landing", touch "Yes" and the drone will land.

Note:

Do not take off or land in your hand, or touch the blades when in use.

Gravity Mode

Click the right stick and tilt the phone to control the flight by using the gravity perceptive system of the phone.

This mode is only available in the U.S.

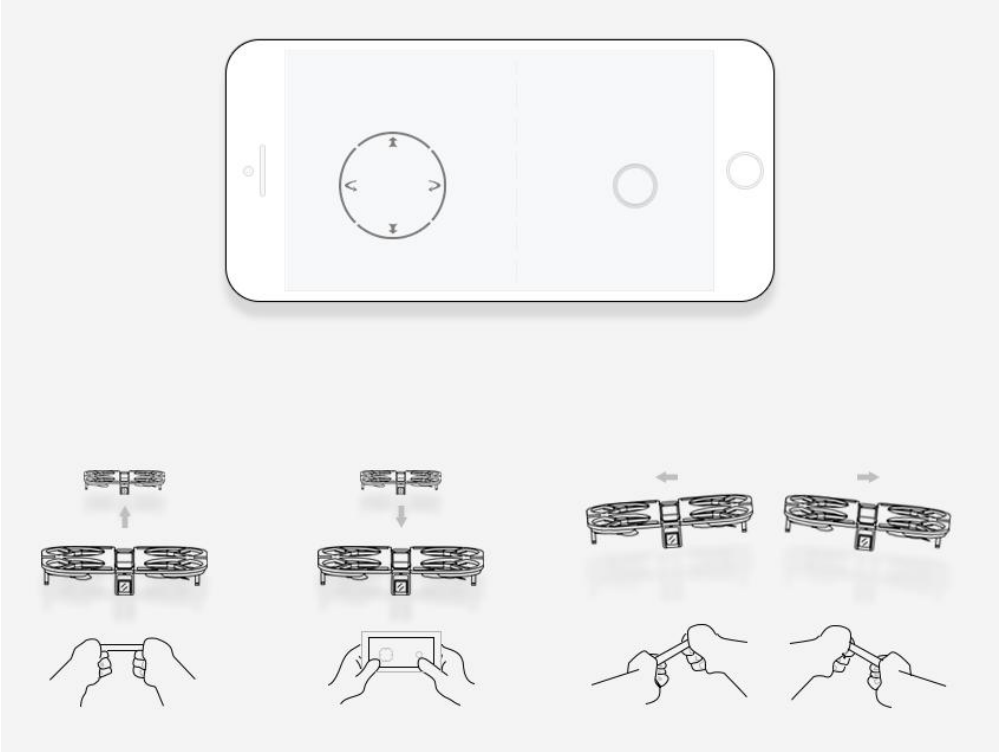
On the left side of the screen is an onscreen slide style control area which controls altitude and yaw.

The control on the right side of the screen controls forward, back, left and right.

Forward, Back, Left, Right: When AFM is active tilting the device forward and back will control the forward and back motions of the drone. Tilting the device left or right will move the drone left and right.

Up/down:Place your finger inside the control area on the left stick, then slide it up or down to control the drone’ s altitude.

Turn Left/Right:Place your finger inside the control area on the left stick, then slide it left or right to control the drone’ s yaw.

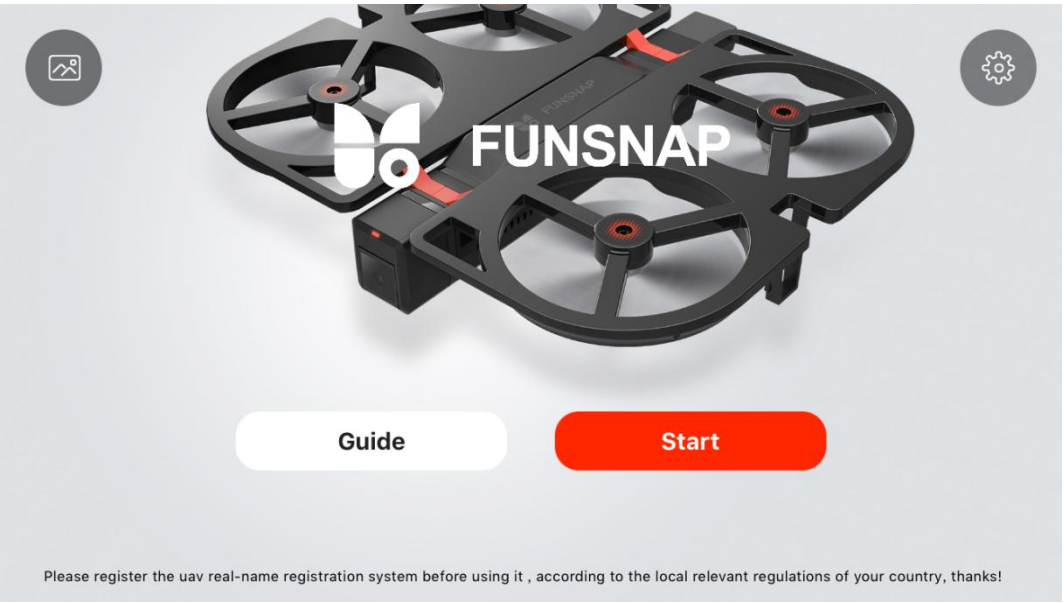


App

APP Overview

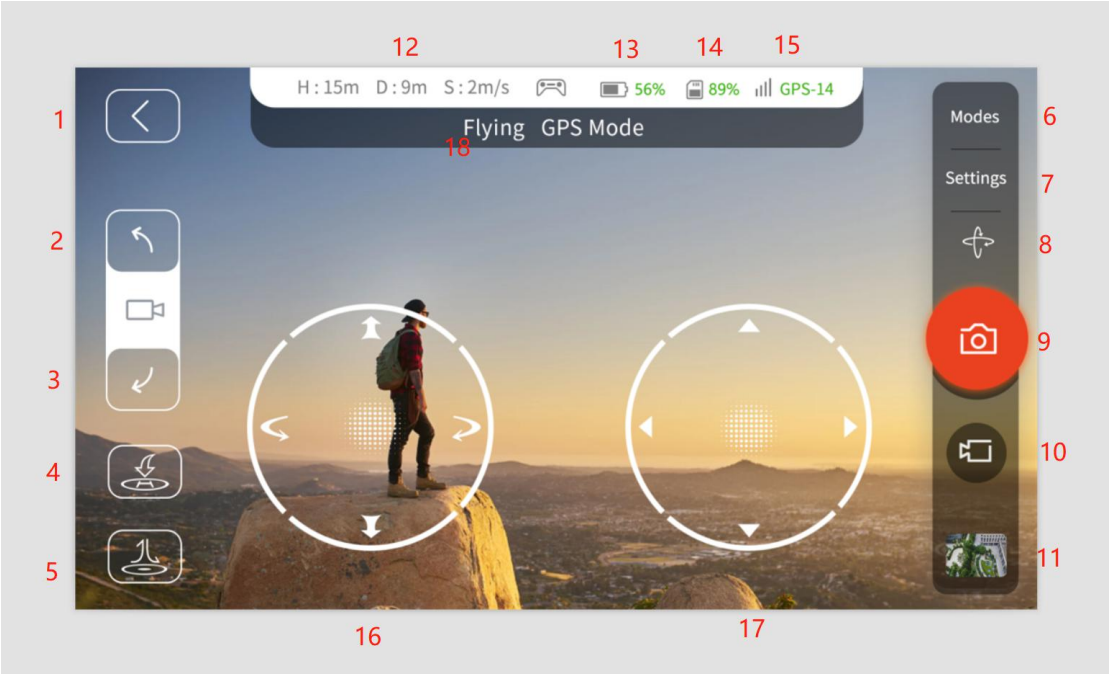
The FUNSNAP App is a companion app developed specifically for iDol. Users can use the FUNSNAP App instead of the remote control to control the flight and shooting pictures/video. It can also share the photos and videos directly to social networks.

The APP is divided into the main interface and the control interface. Click on the main interface to connect the device.



APP Control Interface

The FUNSNAP APP’ s control interface integrates status information and function controls required for flight and taking pictures/video.



1. Back	2. Move camera Up	3. Move Camera Down
4.One key Return Home	5. One key Takeoff/Landing	6.Smart Mode
7.Flight Settings	8.Real-time Function	9.Picture
9. Video	11. Photo Thumbnail	12. Current Height, Distance and Speed
13. Power	14. SD Card Size	15. GPS Signal Strength
16. Left Stick	17. Right Stick	
18. Warning (Flight Status/Remote Control connection/Low Battery Alert)		

1、Return to Main Screen

Touch  Return to the main screen.

2、Camera Up

Touch  Move up the camera lens.

3、Camera Down

Touch  Move down the camera lens.

4、One Click Return Home

When the drone has a GPS lock touch the Takeoff/Landing icon was used to take off, touch the One Click Return button to return and land in the original take off position.

5、One Click Takeoff/Landing

Touch the  icon, the system will prompt "Confirm Takeoff", select "Yes" and the drone will take off automatically. Touch it again and the system will prompt "Confirm Landing", then the drone will land automatically.

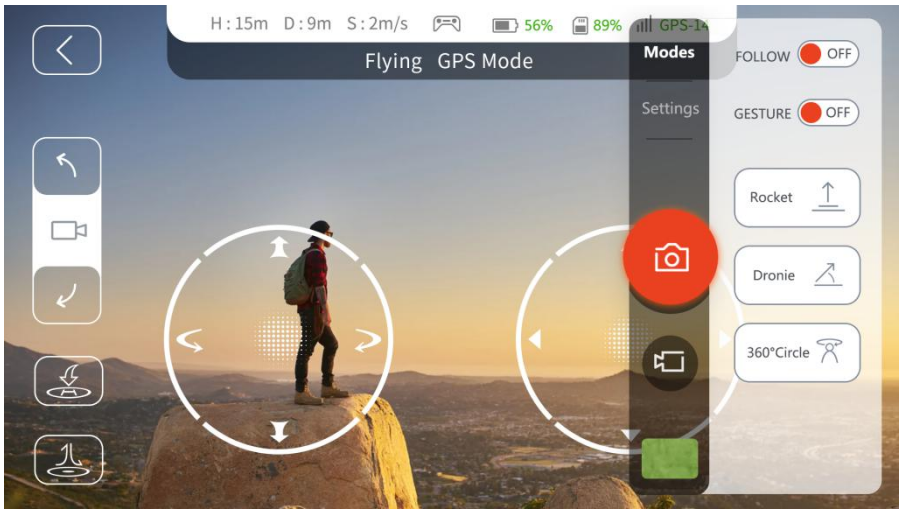
6、Smart Mode

Touch "Smart Mode" to select between of 5 different modes: Smart Follow, Gesture Control, Rocket, Dronie and 360° Cricle.

Turn on smart follow and select a person/item that needs to be followed. The drone will automatically identify the person/item for hands free operation.

Turn on gesture control: Gestures can be used to take pictures with the

drone. Waving can control the drone lending.



Click Rocket to move the camera lens upwards to see the target.

Click Dronie to move the drone away and follow a target.

Click 360° Cricle to spin the aircraft in place.

7、Flight Settings

Click on flight settings, the available modes are: Fast, Slow, Headless, Gravity Mode、US/Japanese hand switch and Electronic Fence.

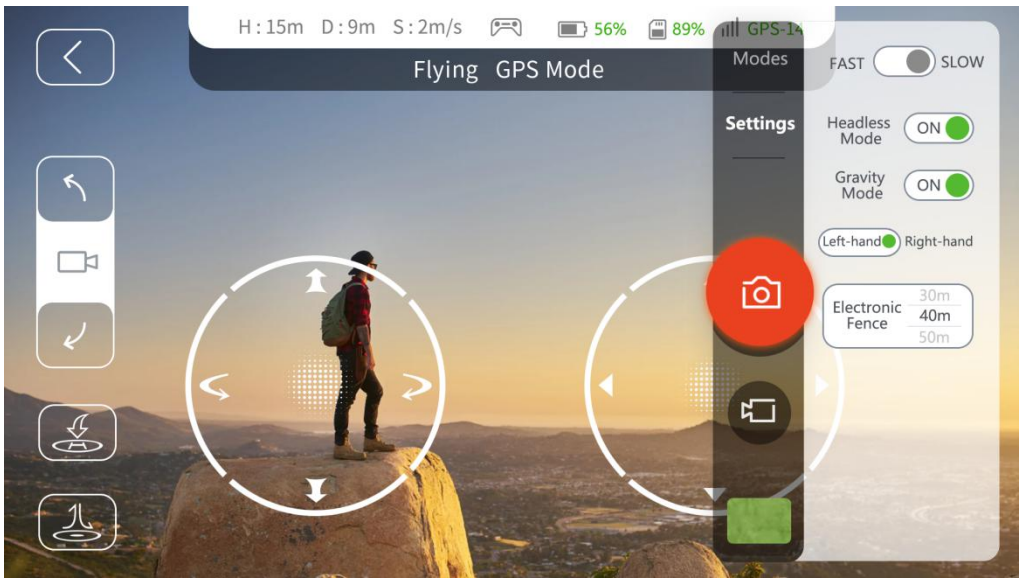
Fast and slow speed control.

Headless Mode allows you ignore the flight direction . flying backward will make the drone fly to the direction of the take-off point.

Click the right stick and tilt the phone to control the flight by using the gravity perceptive system of the phone.

Adjust the way the APP lever is operated by switching between U.S. hand/Japanese hand.

Electronic Fence ensure the drone flying in the safe area



8、Real-Time Function

When smart follow, gesture control, headless or Gravity Mode is turned on, this area will display the corresponding icon according to the special function that is turned on, and clicking this icon will end the special function. After the special function is over, no content is displayed in the area.

9、Taking a Picture

Touch to take a picture.

10、Video

Touch to start and stop video capture.

11、Thumbnail

Touch Review picture/video.

12、Current Height, Distance and Speed

Display the current altitude, distance and current speed.

13、Power

Displays the current drone battery status.

Note: If the battery level drops below 10 percent while in flight, the drone will land automatically.

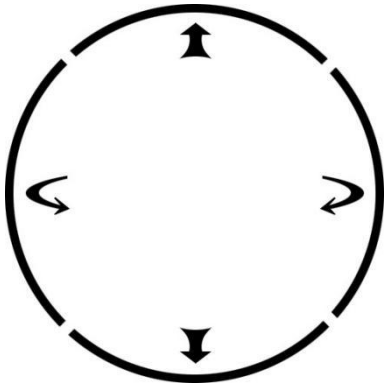
14、SD Card

Display how much memory is left on the current SD card.

15、GPS Signal Strength

Display the current GPS signal strength

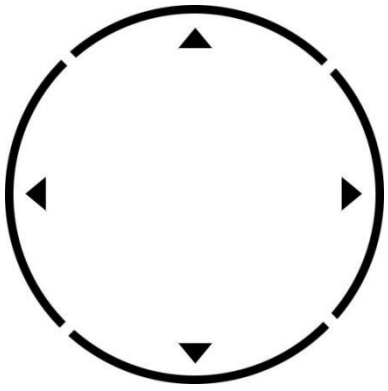
16、Left Stick



Place your finger in the middle and slide it up or down to control assent and decent.

Place your finger in the middle and slide it left or right to turn the drone left or right.

17、Right Stick



Place your finger in the middle and slide it up, down, left and right to move the drone forward, back left and right respectively.

18、Warnings

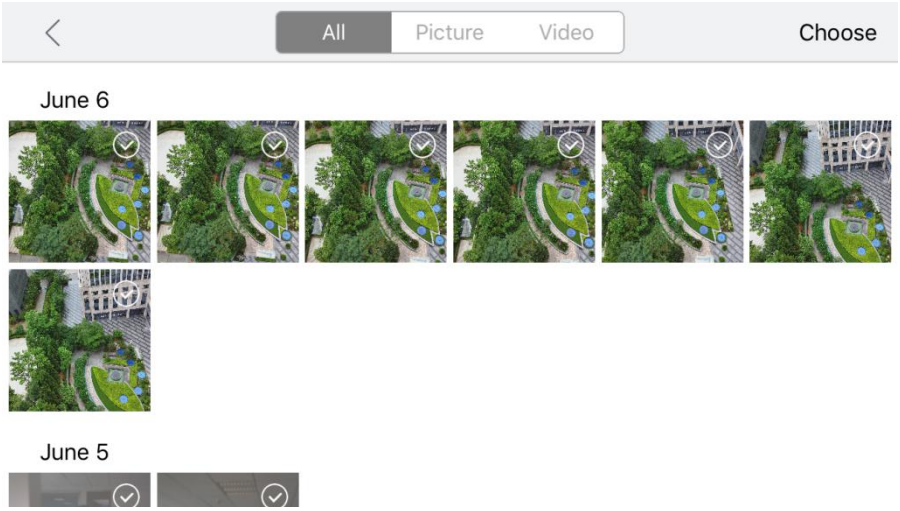
The warning area is normally used for special circumstances such as: Low battery, low GPS signal strength or weak optical flow signal.

Media Library

Real time Gallery

Touch the icon located at the Lower right corner of the main interface to enter the Real time Gallery.

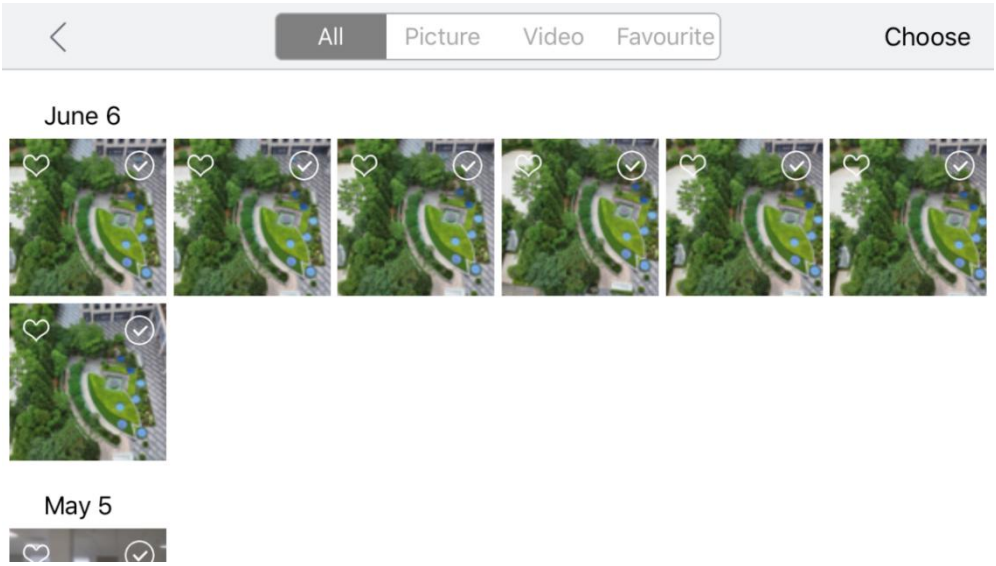
When the mobile device and aircraft are linked, you can view or download HD video or pictures.



Local Gallery

When the mobile device and aircraft are not linked you can view local videos or photos that have been downloaded previously. The content will be arranged in chronological order, from the newest to oldest. Select the

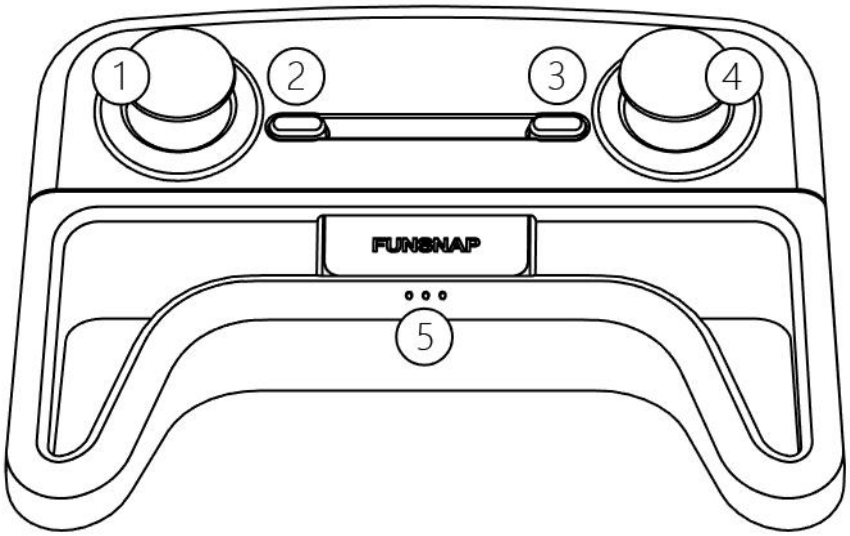
video/photo you wish to download, then touch download to transfer it to your mobile device.

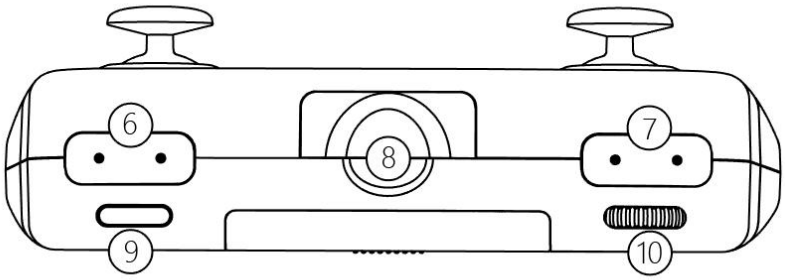


Controller

Controller Overview

The iDol controller is part of a new generation of transmission systems, which are easy to operate and control.





1、Left Stick	5、Status Indicator	8、Phone Holder
2、Takeoff Key	6、Return Key	9、Speed Control
3、Power Switch	7、Camera	10、Lens Angle
4、Left Stick	(Picture/Video)	Control

Preparation before Operation

Battery and Power

This remote controller is powered by 3 AAA Batteries. Place your new battery in the battery tray, make sure it faces the proper direction and ensuring it is properly secure to prevent movement.

When the battery power gets low, the status LED will be flashing and there will has an audible low battery signal warning to alert you for the battery replacement.

Power On

Press and hold the power button for about one seconds until the status LED flashes.

Binding

Power on the remote controller and aircraft, then move the left stick up and down. When the left stick return to its default position, the status LED of the aircraft will change color to indicate that binding is successful while the app will display “Controller Connected”.

Horizontal Calibration

Unfold the aircraft and place it on a horizontal surface. Move the left and right sticks to the lower left at the same time for about one seconds to start the calibration. The White LED will single flash for about five seconds when Horizontal Calibration mode is activated. The status indicator will flash blue twice when the calibration is completed.

Compass Calibration

Unfold the aircraft and place it on a horizontal surface away from any metal objects, then move the left and right sticks to the lower right at the same time for about one seconds to start the compass calibration. When the white LED single flash, please hold the aircraft horizontally and rotate it for 4 times. When the LED begin dual flash , hold the aircraft vertically and rotate it for 4 times. The status LED will change its color when calibration is completed.

When the status LED change to green and keeps on which will indicates

the GPS is connected and ready to fly outdoor.

How to use the basic functions

Left Stick

Push the left stick upwards and downwards can control the ascending and descending of the aircraft.

Push the left stick leftward and rightward corresponding to the counterclockwise and clockwise rotation of the aircraft.

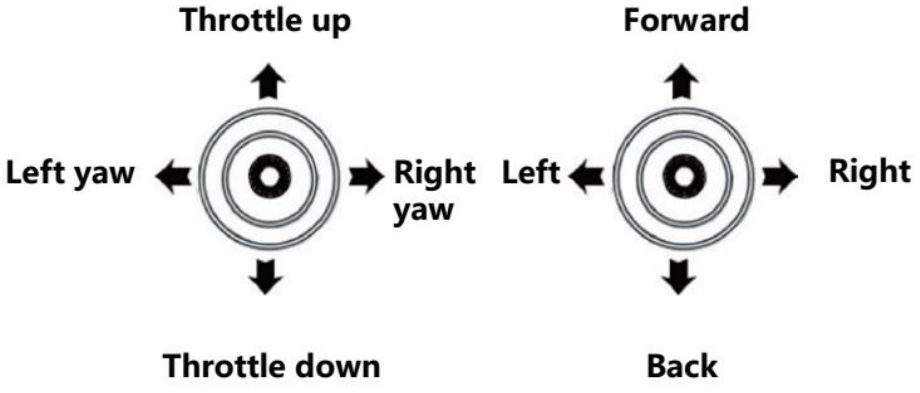
Left stick: up - ascending; down - descending; left - counterclockwise; right - clockwise

Right Stick

Push the right stick upwards to move the aircraft forward and downwards to backwards.

Push the right stick to left or right can control the aircraft to fly leftward or rightward.

Right stick: forward – fly forward; rear - fly backward; left - fly leftward; right - fly rightward



Takeoff and Landing

One-key Takeoff and Landing: Once press this button, the drone will start to takeoff or landing.

Note: It will take about 4 seconds between launching this command for next use.

Manual Takeoff: Move the left stick to the bottom left and the right stick to the bottom right at the same time to activate the manual takeoff during which the propellers already prepare well for a flight, then move the left stick upward for a takeoff.

Manual Landing: Move the left stick downwards to control the descending until the aircraft reach the ground.

Emergency Stop: In case of any emergencies happened during the flight, the aircraft can be stopped flying and land on the ground by moving the left stick to the bottom left and the right stick to the bottom right at the same time.

Replace Propeller

If one of the iDol’ s propellers is damaged, the user can replace it in accordance with this instruction manual.

1、The iDol has 4 propellers, 2 rotate clockwise and 2 anticlockwise. The propellers that are diagonal to each other spin in the same direction. When replacing the propeller it is essential that the correct propellers are

installed in the correct positions.

1、Turn the iDol over so that the exposed side of the propeller is facing upwards.

2、Remove the screw on the propeller and gently press on the motor to remove it.

Insert the new propeller and screw it on. Make sure the correct propeller is installed. Use the letters on the blade to determine the rotation of the propeller.

Note:

- ✧ Do not remove or disassemble parts other than the propeller without authorization.
- ✧ Do not use excessive force when removing or inserting screws to avoid damaging the screws or other parts.
- ✧ When installing or removing a propeller take care not to use too much force to avoid damaging the propeller.
- ✧ Do not overtighten or loosen the screws.
- ✧ Each propeller requires 2 screws to be secure.

Battery Disposal

The battery may age over time and may not be used for other products. Do not continue to use the batter in the following cases, be sure to handle, recycle and dispose of the battery in accordance with local laws.

Bulging: If the battery’ s surface has obvious bulging, deformation or other abnormalities.

Aging**:** There are not obvious signs of damage but the battery life has become greatly reduced.

Damage: There is obvious damage such as cracks, wear, piercing or other abnormalities.

There are obvious signs of damage such as cracks, wear or stab marks. To avoid damaging the battery, keep away from moisture or dust. If not used for a long time, please remove the battery and store it separately. When storing the battery make sure it says within a temperature range of 5°C-40°C.

For more information please read the battery’ s user manual.

Storage & Transportation

Store the iDol in a suitable environment and do not place any heavy objects on the drone.

Battery Storage

Store the battery separately in a suitable environment to prevent the battery from over discharging.

Battery storage temperature range:

Short-term storage (less than one month): -10°C-40°C

Long-term storage (more than one month): -10°C-30°C

Transport

Make sure the iDol battery remains within the temperature range of 23 ± 5 °C.

For more information, please read the battery safety user manual.

Firmware Update

Update the firmware via the FUNSNAP APP.

1、Connect the mobile device to the iDol to obtain the firmware version of the drone.

2、The latest version will be transmitter wirelessly to the drone.

3、Once the transfer is complete, the iDol drone will start to update the firmware. The process will take about 5 min during which the status indicator will be flashing and remain blue.

4、After the firmware has successful been updated, the drone will automatically power off and restart.

Note:

- ✧ Before updating the firmware make sure the iDol’s battery is over 50 percent power.
- ✧ Once the update is complete check the firmware version via the FUNSAP app to confirm that the update has been successful.

Appendix

Drone Specifications

Expand Size: 226 × 268 × 43 (mm)

Folding Size: 226×144×48(mm)

Net Weight: 360g (Including Battery)

Max. Level-flight speed: 5m/s

Max. Service Ceiling above Sea Level: 4000m

Max. Flight Time: 10 minutes (No Wind)

Wi-Fi Band: 5.8GHz

Camera Specifications

Image Sensor: 1/3 inch CMOS;

Lens: FOV 77.5°; 28mm (35mm format equivalent)

ISO Range: 100-3200

Camera Pitch Range: -90° to 30°

Max. Photo Resolution: 1920x1080

Video Resolution: 1080P, 1920×1080 at 30 fps

Storage Format: JPEG, MP4

Storage Capacity: 8GB (including system files)

Image Transmission Distance: 50 m

Battery Specifications

Max. Charging Time:90min

Battery Capacity: 1800mAh, 13.68Wh

Voltage: 7.6V

Type of Battery: LiPo 2S

Net Weight: 80g

Operating Temperature Range: 5-40°C

Power Charger Specifications

Input : 12V ~2A MAX

Output : 8.7V ~1.6A MAX

Controller Specifications

Operating Frequency: 2.4GHz

Max. Transmission distance: 100m

Operating Temperature Range: 5-40°C

Operating Current/Voltage: 0.04A@4.5V

Warranty

Please visit FUNSNAP official website for the latest service information.

Warranty Policy: http://www.funsnap.cn/index.php/repair3/

Return Policy: http://www.funsnap.cn/index.php/repair3/

RoHS

CERTIFICATE

Anbotek
Product Safety

CERTIFICATE

Of Conformity
EC Council Directive 2011/65/EU
Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

Registration No.: ATSZARR180425011M1

Report No.: SZARR180425011-01 M1

Applicant : **Shenzhen Funsnap Technology Co.,Ltd**
1506 South Wing，YuanXing Technology Building, No.1 Songpingshan Road, NanShan, ShenZhen, China

Product : **iDol Drone**

Identification : **Model No.** : **iDol-01**

Trade Mark : FUNSNAP 逗映科技

Test method : **IEC 62321-3-1:2013 Ed.1.0, IEC 62321-5:2013 Ed.1.0, IEC 62321-4:2013 Ed.1.0, IEC 62321-7-1:2015 Ed.1.0, IEC 62321-7-2:2017 Ed.1.0, IEC 62321-6:2015 Ed.1.0**

Note: The certificate ATSZARR180425011M1 supersedes the certificate ATSZARR180425011which is withdrawn.

This is to certify that, the certificate is based on Anbotek's test results and other related substance information provided by applicant. The submitted sample fulfills the requirement of the Directive 2011/65/EU (RoHS).

CE Product RoHS

Certified by

May. 07, 2018
Date

ANBOTEK Anbotek CERTIFICATION

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